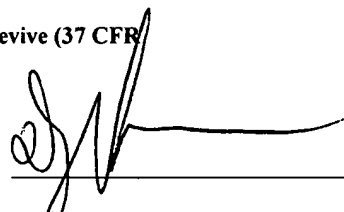


FORM PTO-1390 (REV 10-94)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER 10873.1910USWO
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371			U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) UNKNOWN <b>10/584478</b>
INTERNATIONAL APPLICATION NO. PCT/JP2005/001757	INTERNATIONAL FILING DATE FEBRUARY 7, 2005	PRIORITY DATE CLAIMED FEBRUARY 10, 2004	
TITLE OF INVENTION HEAT EXCHANGER, METHOD FOR MANUFACTURING THE SAME, AND HEART-LUNG MACHINE			
APPLICANT(S) FOR DO/EO/US YOSHIDA et al.			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(I).</li> <li>4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US)</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)).</li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> have been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).</li> <li>10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> <p><b>Items 11. to 16. below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98 Form 1449, 3 references, copy of International Search Report (Form PCT/ISA/210).</li> <li>12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A FIRST preliminary amendment including Replacement sheet(s) 4 of 11 and 6 of 11 and Annotated sheet(s) 4 of 11 and 6 of 11. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment.</li> <li>14. <input type="checkbox"/> A substitute specification.</li> <li>15. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>16. <input checked="" type="checkbox"/> Other items or information: Application Data Sheet (4 pages), International Publication Page(s) of WO 2005/075922 A1, Communication re: Requested Figure, Form PCT/ISA/237 (in Japanese language), Form PCT/IB/304, Form PCT/IB/308.</li> </ol>			

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
UNKNOWN <b>10/584478</b>		PCT/JP2005/001757		10873.1910USWO	
<b>BASIC NATIONAL FEE (37 CFR 1.492(a) (1)-(5)):</b>					
[X] a) Basic National fee.....				\$300.00	\$300.00
[X] b) Examination fee.....				\$200.00	\$200.00
[X] c) Search fee.....				\$500.00	\$500.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$1000.00	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		Rate	
43 - 100 =	0 /50 =			X \$250.00	\$0.00
Surcharge of \$130.00 for furnishing the oath or declaration later than [ ] 20 [ ] 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$0.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	12 -20 =	0	X \$50.00 \$0.00		
Independent claims	2 -3 =	0	X \$200.00 \$0.00		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00 \$0.00		
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$1000.00	
Reduction by 1/2 for filing by small entity, if applicable. Small entity status is claimed pursuant to 37 CFR 1.27				\$0.00	
<b>SUBTOTAL =</b>				\$1000.00	
Processing fee of \$130.00 for furnishing the English translation later than [ ] 20 [ ] 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				+	\$0.00
<b>TOTAL NATIONAL FEE =</b>				\$1000.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+	\$40.00
<b>TOTAL FEES ENCLOSED =</b>				\$1040.00	
				Amount to be:	
				refunded	\$0.00
				charged	\$0.00
a. [X] Check(s) in the amount of \$1040.00 to cover the above fees is enclosed.					
b. [ ] Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. [X] The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>50-3478</u> .					
<b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</b>					
SEND ALL CORRESPONDENCE TO: DOUGLAS P. MUELLER Hamre, Schumann, Mueller & Larson, P.C. P.O. Box 2902-0902 Minneapolis, MN 55402					
				SIGNATURE:	
				NAME:	DOUGLAS P. MUELLER
				REGISTRATION NUMBER:	30,300

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: YOSHIDA et al.

IAP2 Rec'd PCT/PTO 23 JUN 2006

Docket: 10873.1910USWO

Title: HEAT EXCHANGER, METHOD FOR MANUFACTURING THE SAME, AND  
HEART-LUNG MACHINE**CERTIFICATE UNDER 37 CFR 1.10:**

"Express Mail" mailing label number: EV 858803728 US

Date of Deposit: JUNE 23, 2006

I hereby certify that this paper or fee is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to MS PCT, Commissioner for Patents, P.O. Box 1450 Alexandria, Virginia 22313-1450.

By: 

Name: ABBIE LARKIN

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

We are transmitting herewith the attached:

- ☒ Transmittal sheet, in duplicate, containing Certificate under 37 CFR 1.10.
- ☒ National Stage PCT Patent Application: Spec. 26 pgs; 11 claims (5 pages); Abstract-1 pg.  
The fee has been calculated as shown below in the 'Claims as Filed' table.
- ☒ 11 sheets of formal drawings
- ☒ A signed Combined Declaration and Power of Attorney
- ☒ Assignment of the invention to JMS CO., LTD., Recordation Form Cover Sheet
- ☒ Check in the amount of \$1000.00 to cover the Filing Fee and \$40.00 for the Assignment Recording Fee
- ☒ Information Disclosure Statement, Form 1449, 3 references.
- ☒ Application Data Sheet, 4 pages.
- ☒ Other: Form PTO-1390, Publication page of WO 2005/075922 A1, translation of the International Application into English, Communication re: Requested Figure, Preliminary Amendment including Replacement drawing sheet(s) 4 of 11 and 6 of 11 and Annotated drawing sheet(s) 4 of 11 and 6 of 11, Form PCT/ISA/210, Form PCT/IB/304, Form PCT/IB/308, Form PCT/IPEA/237 (in Japanese language).
- ☒ Return postcard

## CLAIMS AS FILED

Number of Claims Filed	No.	In Excess of	Extra	Rate	Fee
Total Claims	12	20	0	50.00	= 0.00
Independent Claims	2	3	0	200.00	= 0.00
Multiple Dependent Claims Fee					= 0.00
Basic Filing Fee					= 300.00
Search Fee					= 500.00
Examination Fee					= 200.00
Utility Application Size Fee	43	100	0	250.00	= 0.00
Total					= 1000.00

Please charge any additional fees or credit overpayment to Deposit Account No. 50-3478. A duplicate of this sheet is enclosed.

Hamre, Schumann, Mueller & Larson, P.C.  
P.O. Box 2902-0902 Minneapolis, MN 55402  
612.455-3800By: Name: Douglas R. Mueller  
Reg. No.: 30,300  
Initials: DPM:nel

52835

PATENT TRADEMARK OFFICE

(PTO TRANSMITTAL - NEW FILING)

IAP2 Rec'd PCT/PTO 23 JUN 2006

S/N unknown

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: YOSHIDA et al. Examiner: unknown  
Serial No.: unknown Group Art Unit: unknown  
Filed: Concurrent Docket: 10873.1910USWO  
herewith  
Title: HEAT EXCHANGER, METHOD FOR MANUFACTURING  
THE SAME, AND HEART-LUNG MACHINE

CERTIFICATE UNDER 37 CFR 1.10:

"Express Mail" mailing label number: EV858803728 US

Date of Deposit: JUNE 23, 2006

I hereby certify that this paper or fee is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Arlington, VA 22313-1450..

By: 

Name: ABBIE LARKIN

COMMUNICATION REGARDING REQUESTED FIGURE

MS PCT  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In connection with the above-identified application, applicant respectfully requests that Figure 1 be printed on the front page of the published application.

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &  
LARSON, P.C.  
P.O. Box 2902-0902  
Minneapolis, MN 55402-0903  
(612) 453-3800

Dated: June 23, 2006By: 

Douglas P. Mueller  
Reg. No. 30,300

DPM:nel